

PROJECT INITIATION FORM  
R&D LABORATORY

This document is part of an integrated file. If separated from the file it must be subjected to individual systematic review.

PROJECT TITLE: **"SARAH" Beacon Tests and Modification**

DATE INITIATED: **Approx. 1 April 1956** NOMENCLATURE: **--**

PROJECT NUMBER: **2039** DATE REQUIRED: **Soon as possible**

EQUIPMENT CLASSIFICATION: **Unclass.** REPORT CLASSIFICATION: **To be determined**

SOURCE OF REQUEST: **R&D/EP** AUTHORITY: **Verbal - Chief, R&D**

LIAISON CONTACT:  QUANTITY REQUIRED: **--** 25X1

PRIORITY: **#**  25X1

TYPE OF EVALUATION: **N.A.** ASSIGNED TO: **Design**  25X1

DATE SUSPENDED OR CANCELLED: **N.A.**

DESCRIPTION OF PROJECT:

1. Determine the frequency stability of the beacon oscillator over a range of temperatures to be determined. **(-40 +50°C)**
2. If amount of frequency drift is compatible with the receiving bandpass characteristics of the ARC-27 Transceiver, modify the circuitry for optional pulse or c.w. type operation. Install toggle switch on control panel to accomodate this function.
3. Measure the RF power output of the modified SARAH in the c.w. mode of operation.
4. Forward details of modification to R&D/EP together with any supporting comments believed to be pertinent.

SIGNED

DATE: **16 April 1956**

25X1

CONFIDENTIAL

# DOCUMENT SEPARATOR



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FROM

SUBJECT: REPLACEMENT SUBASSEMBLIES AND SPARES  
FOR SARAH SEARCH EQUIPMENT AR1-5876  
AND THE MK 220 BEACON.

25X1

IN RESPONSE TO YOUR PHONE  
INQUIRY, HERE IS A LIST OF  
RECOMMENDED SUBASSEMBLIES AND  
SPARE PARTS FOR ~~TEN~~ ~~RECEIVERS~~  
~~AND BEACONS ON HAND~~. THE  
SUBMINIATURE SARAH RECEIVER  
AR1-5876 AND MK 220 BEACON.  
BASED ON ~~PREVIOUS~~ EXPERIENCE OF  
REPAIRING THE SARAH EQUIPMENT, THE  
RECOMMENDATION IS MADE TO MAINTAIN  
AS SPARES AND REPLACEMENT SUBASSEMBLIES  
~~FOR EACH~~ ~~FOR~~ TEN RECEIVERS ON  
HAND, THE FOLLOWING COMPONENTS:

(1) Sarah Receiver AR1-5876

(A) - 1 power unit, less case, type  
8094

(B) - 1 time base unit subassembly

(C) - 1 RF unit subassembly

(D) - 1 IF unit subassembly

(E) - 2 - Aerial and X-plate

Change-over relay.

(F) - 1 - Oscillator drive unit.

(2) In addition the following tubes

This information was phoned to  
14 May 1957

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and components are recommended as spares for the Sarah Receiver AR1.5876

(A) - 2 CV 465 Tubes

(B) - 1 CV 468 Tubes

(C) - 2 CV 469 Tubes

(D) - 1 6EC/CAMA 401 Cathode ray tube

(E) - 2 U709 Tubes

(F) - 2 2289 Tubes

(G) - ~~2~~ 47 OHMS VITREOUS ENAMELLED

RESISTORS, 5 WATTS.

H - 10 - subminiature fuses 500 MA.

I - 10 - subminiature fuses 2 AMPS.

(3) - MK 220 Beacon

(a) - 2 spare vibrators

B - 2 EC 81 tubes

(4) - To properly align the subassemblies, the suggestion is made to obtain the following items:

(a) 1 - Test Set, as illustrated in the instruction manual, to align receivers.

(B) Alignment instructions for the RF, IF, and Time base sections of the Sarah Receiver AR1.5876.